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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/697,260 | 10/31/2003 | Shinichi Ito | 04329.2437-03 | 9211 |

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| EXAMINER |
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BAREFORD, KATHERINE A

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| ART UNIT | PAPER NUMBER |
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1762

DATE MAILED: 11/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/697,260

Applicant(s)

ITO, SHINICHI

Examiner

Katherine A. Bareford

Art Unit

1762

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) 13-17 and 20-25 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 18 and 19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Claims 1-12 are canceled

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10/03, 4/05.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. The Examiner notes the preliminary amendment filed with the application on October 31, 2003. The preliminary amendment canceled claims 1-12 and provided new claims 20-25, leaving claims 13-25 present for examination.

Election/Restrictions

2. Restriction to one of the following inventions is required under 35 U.S.C. 121:
- I. Claim 13, drawn to a composition, classified in class 106, subclass 316.
 - II. Claims 14-17 and 20-25, drawn to a method of film forming, classified in class 427, subclass 8.
 - III. Claims 18-19, drawn to a method of film forming, classified in class 427, subclass 427.3.

The inventions are distinct, each from the other because of the following reasons:

3. Inventions I, II and III are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions all have different modes of operation.

Invention I provides a composition that does not have to be used with the other inventions and ^{has} features not required by the other inventions. Invention II provides for a method with distance and dropping area requirements not required by the other

inventions. Invention III provides for a method with thickness requirements not required by the other inventions.

4. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

5. During a telephone conversation with Mr. Burgujian on November 16, 2005 a provisional election was made without traverse to prosecute the invention of Group III, claims 18-19. Affirmation of this election must be made by applicant in replying to this Office action. Claims 13-17 and 20-25 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Drawings

6. The replacement drawings were received on October 31, 2003. These drawings are approved.

Specification

7. The amendments to the abstract and specification of October 31, 2003 are approved.

8. The disclosure is objected to because of the following informalities: at page 1, in the reference to parent case 10/144,028, applicant should indicate that it is now U.S.

Patent No. 6,669,982.

Appropriate correction is required.

Double Patenting

9. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

10. Claims 18-19 are provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 18-19 of copending Application No. 10/697,436. This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

Claims 18-19 of the present application and claims 18-19 of 10/697,436 are duplicates.

Claim Objections

11. Claim 18 is objected to because of the following informalities: in claim 18, line 2, "give" should be "given" for grammatical clarity.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

13. Claims 18-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Batchelder (US 5885661).

Batchelder teaches a liquid film forming method of dropping a liquid adjusted to be spread into a given amount on a substrate to be processed from a dropping nozzle or dropping nozzles of a dropping unit onto the substrate. Figure 4 and column 2, lines 35-60 and column 5, lines 10-50. The dropping unit and substrate are moved relatively while keeping the dropped liquid on the substrate so as to form a liquid film on the substrate. Figure 4, column 2, lines 35-60 and column 5, lines 10-50. The relative movement between the dropping unit and the substrate can be composed of spiral movement in which the dropping unit goes from the center of the substrate to the periphery thereof. Figure 4 and column 5, lines 20-30. The thickness of the liquid film is

decided in the manner that the liquid film formed on the substrate flows to an extent which is substantially decided by gravitation applied to the liquid film. Column 5, line 35 through column 6, line 5 (since the wafer does not have to be spun, the only force acting on the applied liquid causing it to flow is that of gravitation).

Claim 19: when applied the thickness of the resist film can desirably be 2.5 microns. Column 4, lines 20-30.

14. Claim 18 is rejected under 35 U.S.C. 102(b) as being anticipated by Yoshiba et al (US 5776545).

Yoshiba teaches a liquid film forming method of dropping a liquid adjusted to be spread into a given amount on a substrate to be processed from a dropping nozzle or dropping nozzles of a dropping unit onto the substrate. Figure 2-3 and 9, column 5, lines 10-20 (the coating solution) and column 6, line 5 through column 7, line 25. The dropping unit and substrate are moved relatively while keeping the dropped liquid on the substrate so as to form a liquid film on the substrate. Figure 2-3 and 9 and column 6, line 5 through column 7, line 25. The relative movement between the dropping unit and the substrate can be composed of straight movement along a file direction in which the dropping unit passes from one end side of the substrate through an upper space of the substrate to the other end side of the substrate, and movement along a rank direction outside the substrate. Figures 1-2, 8 and 9 and column 6, lines 5-20 (as shown by figure 1, movement along the rank direction outside of the substrate occurs with the

dropping unit as well, note how frame 13 is outside of the substrate and subject to relative movement). The thickness of the liquid film can be decided in the manner that the liquid film formed on the substrate flows to an extent which is substantially decided by gravitation applied to the liquid film. Figure 9 and column 8, lines 30-40 (since the substrate is not spun and the nozzle is located above the film thickness from the substrate, the only force acting on the applied liquid causing it to flow is that of gravitation).


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Katherine A. Bareford whose telephone number is (571) 272-1413. The examiner can normally be reached on M-F(6:00-3:30) with the First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on (571) 272-1423. The fax phone numbers for the organization where this application or proceeding is assigned are (571) 273-8300 for regular communications and for After Final communications.

Other inquiries can be directed to the Tech Center 1700 telephone number at (571) 272-1700.

Furthermore, information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


KATHERINE BAREFORD
PRIMARY EXAMINER